



Innovate
UK

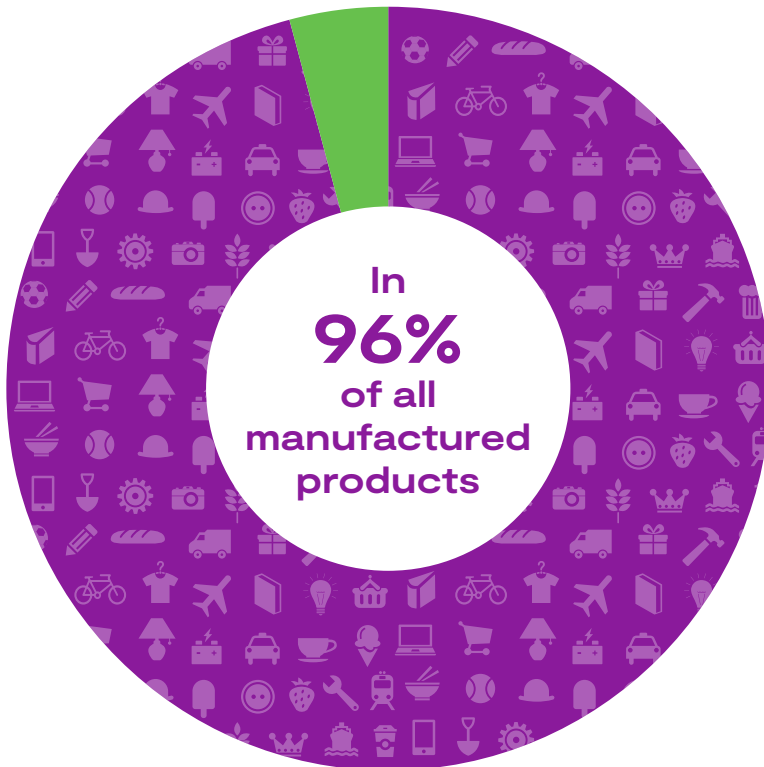


UK CHEM 2050

Building UK chemical supply chains to serve the global market for sustainable products

Chemicals are integral to our lives and are the building blocks of a modern and resilient economy

They are found in almost everything we buy, use, eat and drink



4,415
businesses

Supporting **651,000** jobs

£203,000
GVA per employee



The UK advanced manufacturing base is fundamentally reliant on inputs from the chemicals industry

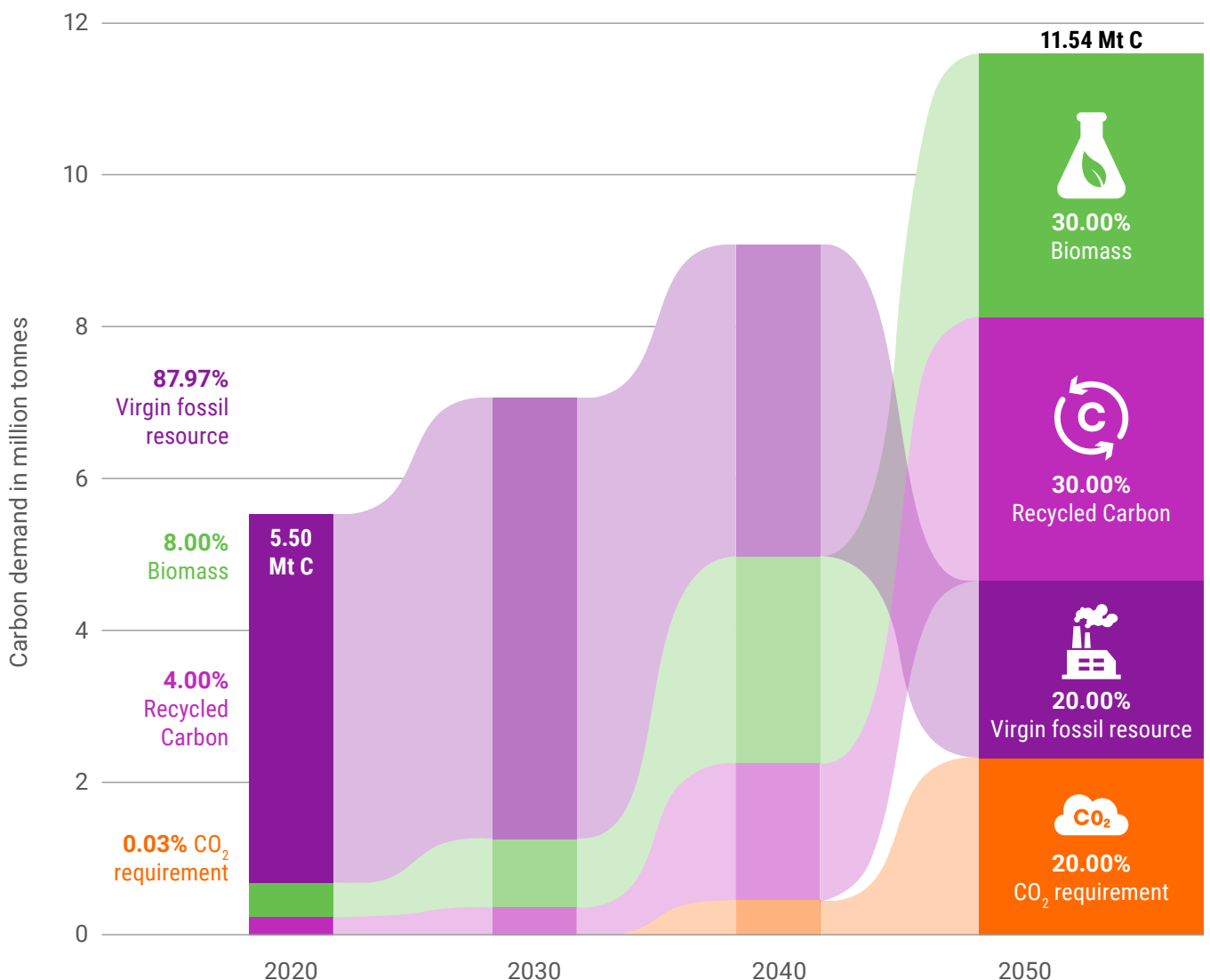
The challenge

- The chemicals industry is responsible for 8% of total global greenhouse gas emissions
- It uses fossil resources, such as crude oil and natural gas, for both energy and as a raw material
- The industry is capital intensive, commercialisation of new technology requires major investment and policy certainty

The 2050 ambition

- The UK chemicals industry will double economic output and will source 80% of its carbon requirements from non-virgin fossil, sustainable carbon sources
- This urgent once-in-a-generation opportunity will create hundreds of thousands of highly skilled, well-paid and productive jobs in regions of the UK most targeted for growth

Industry needs sustainable carbon raw materials



Call to action

The UK chemical sector is asking to work with stakeholders within and outside Government to...

1 Protect the current key assets and infrastructure whilst abating the environmental impact

2 Focus on biomass sustainability and increasing availability, supporting process innovation through engineering biology

3 Establish a chemical recycling industry as part of a wider circular economy

4 Invest in carbon capture and utilisation in locations with abundant low-carbon hydrogen and renewable energy

All enabled by:



Understanding

Understanding feedstock availability, mapping existing assets and supply chain gaps and opportunities, scalability, emerging technology



Policy

Policy coalition on Best Available Carbon management, access to affordable low-carbon hydrogen and renewable energy, Mass Balance Accounting



Collaboration and co-investment

Collaboration and co-investment between industry, academia, and investor communities to provide innovative solutions at pace for UK and global markets